RUT2 Firmware checksum list

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Summary

A **checksum** is a sequence of hexadecimal symbols generated after running an algorithm called a cryptographic hash function on a file. Calculating a checksum and comparing it with the one provided by the file source can be used as a file authenticity check method.

For example, if you download a file like a firmware image, you should be able to calculate that file's checksum and, if the file is authentic, the checksum should match the one provided by the file's source. If the checksums don't match, it means the file's contents were tampered with, for example, by a malicious third party attacker. This file is probably dangerous and shouldn't be trusted.

To help authenticate Teltonika's RUT2XX router firmware files, we are providing a list of checksums for firmware files that can be download from the <u>RUT230 Firmware Downloads</u>, <u>RUT240 Firm</u>

Checksums for RUT2XX firmwares can be calculated with the help of the *md5sum* application or by checking the checksum displayed in the router's WebUI after uploading a firmware image. The values using both methods are different, so we are providing list of values for both different methods.

CLI

You can calculate the checksum of a firmware image file using *md5sum*. This command should work on most Linux distros or you can upload the firmware into the router and calculate the checksum via a <u>command line interface</u>.

When you select a firmware image file for upload via the System -> Firmware page, the file gets uploaded into */tmp/* directory with the name *firmware.img*. So the command to calculate the checksum should look like this:

```
md5sum /tmp/firmware.img
9ac06b19353b7c61753a9f572d21a92e /tmp/firmware.img
```

Bellow the command is the expected response (for $RUT2XX_R_00.01.02.3$ FW in this example), which contains the checksum and the path to the file. If the checksum of the firmware file you downloaded doesn't match with the one provided here, your file must have been tampered with and

MD5 checksums for RUT2XX firmware files

```
• FW version: checksum
     • RUT2 R 00.07.06.10: 953c22f97efb1ed8f165b769bfda067b

    RUT2 R 00.07.06.8: d7d3961d693a10100222e673b1ce74cd

    RUT2 R 00.07.06.6: cdffc2b66686846d0bb64230bac16b57

    RUT2 R 00.07.06.5: f0d507db7e2fad459a1ca819233bb251

    RUT2 R 00.07.06.1: 3aa0bb6df35d4b68398bcbc3f21184dd

    RUT2 R 00.07.06: 53a14bf56447b569b27db7b1544a6720

    RUT2 R 00.07.05.4: c1d827f359893f306297446cc11c9ee4

    RUT2 R 00.07.05: 526a714166d52decb32cdde17235fe69

     o RUT2 R 00.07.04.5: 50f5e796e1f722c394e3dd5a431439f4

    RUT2 R 00.07.04.4: fbbd23c2695203b895ea9fd9cb3a94d2

    RUT2 R 00.07.04.3: c33b2f951a35fe8b57e36591f76007d9

    RUT2 R 00.07.04.2: d375f5b915feba5603d8cf85182e2e60

    RUT2 R 00.07.04.1: c1a1e555a722c50b02ba9b7d3f91f287

    RUT2 R 00.07.04: 9ffe139fdd334cfc60037b72a66f6913

    RUT2 R 00.07.03.4: 29b03ee9b3d28d1f61bb9e8ec6e9cf85

     • RUT2 R 00.07.03.3: 2fc3cc937fd53c074b0b567fa81345fc

    RUT2 R 00.07.03.2: 6aa0a7d86b44f4c2d5832cb2a361d7ef

     • RUT2 R 00.07.03.1: 0eb7e39f0db734dabcf6e44f71c3b41d

    RUT2 R 00.07.03: bf903734f2480d211c4fc598a420fed9

    RUT2 R 00.07.02.7: 73e44526d2d8648bee8b1195c3dff495

    RUT2 R 00.07.02.6: 5489acaf96af23ce0d26c2c0fd5935f7

    RUT2 R 00.07.02.5: 9a895480fb72713380ac140674092c3d

    RUT2 R 00.07.02.4: efab90bd37f947fa1a5e403bdf07ded0

    RUT2 R 00.07.02.2: 3b53460d46c1e67301bb21c83a989fc5

    RUT2 R 00.07.02.1: e4a8c025eefdfff9f8975d9da0896978

    RUT2 R 00.07.02: cda4f04c61a2f9d33c7c32eb8314f0f3

    RUT2 R 00.07.01.4: 6e40160d80cb663acb61b332361d1ee2

    RUT2 R 00.07.01.2: 4918191d5b5da3d74f26c93657ec7004

    RUT2 R 00.07.01: bf4e47b0c6a3421a56a49cb27c0bfc82

     • RUT2XX R 00.01.14.7: 0e5c6e998a50c3e12c3ca1e35375eadc

    RUT2XX R 00.01.14.6: 5cccfb64cc3561a125c0eda0746b1a72

    RUT2XX R 00.01.14.5: 465694ac92001dbf0715e43342032b52

    RUT2XX R 00.01.14.4: 9d2e697e234e5927ffeacf30c4310994

    RUT2XX R 00.01.14.3: 80402b938c3f0d9b8c785683fe97fe30

    RUT2XX R 00.01.14.1: c21b6aea92b608eff979f114b1861655

    RUT2XX R 00.01.14: 03032630390df06469c981cf11e32006

    RUT2XX R 00.01.13.3: c1772d865308d15391d550b83f85bc6f

    RUT2XX R 00.01.13.2: c61c586ebcb8a0eac905661d15b3ca16

    RUT2XX R 00.01.13.1: 8046d6d3c4b4cec89ebe0440d452023a

    RUT2XX R 00.01.13: 4cea9ad3e0d37dc91a5a9a4375334172

    RUT2XX R 00.01.12.3: a1769046a6b54d978a653752384dd622

    RUT2XX R 00.01.12.2: 48d1d18d529c77f6c38da3ec9cad21a9

    RUT2XX R 00.01.12.1: 37e0d26cfa3a5137cc114a66dc2b955b

    RUT2XX R 00.01.12: 1fa97ba951ec2c7f8887f60bd5c12454

    RUT2XX R 00.01.11.3: a6d8c406a015147995d940ae399e5871

    RUT2XX R 00.01.11.2: f6460bdbe6d3f279ef01fa58cebf119b
```

```
    RUT2XX R 00.01.11.1: 2d093574b91b510a6e5259c3d5edfc7d

    RUT2XX R 00.01.10: 2259e892e510b1f2d123eb0581e354ba

    RUT2XX R 00.01.07.1: 4f7ab24e7d967a9fb33ce3d63cecdd37

    RUT2XX R 00.01.07: 1fd5e325f0cf8a7e886d63f9af69f0dc

    RUT2XX R 00.01.06.1: af4b41ead5dc1e31190ecf1bde0ad941

    RUT2XX R 00.01.04.2: 6139025fb7076bf863c9913f02271d11

    RUT2XX R 00.01.04.1: d4626dc9665878e1a5591d659276b0d9

    RUT2XX R 00.01.03.5: 598fb6f019bea09abefa4dde644539bc

    RUT2XX R 00.01.03.2: 687a474f0b06f90ab7e2e70ef98b58ac

    RUT2XX R 00.01.02.6: 6a141d1caab0874c9b63d9ce28cc94d0

    RUT2XX R 00.01.02.3: 9ac06b19353b7c61753a9f572d21a92e

    RUT2XX R 00.01.01.4: 78ee432012897da8b2215d0e3c6abc42

    RUT2XX R 00.01.01.00: 87a6506e2962c8fee5db599b104db98f

    RUT2XX R 00.00.553: 2483425fb1c2c4509680dfe0dd2cc5ef

    RUT2XX R 00.00.539: 3ec22055e89d4a05cba8557cc1615eec

    RUT2XX R 00.00.486: ce69ee7f04c5776b5ff0ec5e4724f263

    RUT2XX R 00.00.482: 1b30c3ea977e7ddec3409fc6e6ee03a8

    RUT2XX R 00.00.474: 660ac126a8911e20f3b5b85b89ec7d4b

    RUT2XX R 00.00.388: 106aa753ba18bca6df825d581691217a

    RUT2XX R 00.00.382: 825997630af0399bb6dae182c7d9fe4b

    RUT2XX R 00.00.377: 3487e2cca8205de4e951a1c5e72bf3ca

    RUT2XX R 00.00.372: 15d241761873db6cf4b03f36690b15e6

    RUT2XX R 00.00.355: 44954ab35e562e6eca39401ce5df3bdc

    RUT2XX R 00.00.339: 13da9492bdad38b2e50d7aebe06157d9

    RUT2XX R 00.00.312: 42b64d5fbd5f15bbddfaceb6d3d23487

\circ \ RUT2XX\_R\_00.00.307; \ e4ecd14654fccbc0f2955c21b0752096

    RUT2XX R 00.00.296: 76d0ceeacd8cac3e5ecaa6e2aac75aa3

    RUT2XX R 00.00.284: e64b798e5053ddb7a07c663753db6623
```

WebUI

You can also check the checksum of a firmware file via the router's WebUI. When you upload a firmware image file and click upgrade, the firmware is uploaded and you are redirected to another window, where you have to confirm the upgrade. In this window, the checksum is displayed as well, but it is different than the one you get from CLI.

Checksums for RUTXX firmwares (WebUI) are as follows:

- FW: checksum
 - $\circ \ RUT2XX_R_00.01.14.1: bf9df07e174b3431c4cd6e57dd71bc8c$
 - $\circ \ RUT2XX_R_00.01.14: d9b4ad2c47e6ca84e523b4ce2b524243$
 - RUT2XX R 00.01.13.3: 45860d70b0d00ba45351a03fe79c7ac0
 - RUT2XX R 00.01.13.2: 8a2d447b71e5df1b3bfd971ec79709c2
 - RUT2XX R 00.01.13.1: d9390127a725a8775b1ba50e66263535
 - RUT2XX R 00.01.13: a4710ad271653999687ffbe7fb6f8e36
 - RUT2XX R 00.01.12.3: 915eaf07e376468728c66320d191c774
 - RUT2XX R 00.01.12.2: cd765c6a9aeca7e8222bdc105a5cc3fd
 - RUT2XX R 00.01.12.1: 5e23c81781b90c6343291ddf522a0899
 - RUT2XX R 00.01.12: 9ad8cb65c3699e21dc30b256a5c79f92
 - RUT2XX R 00.01.11.3: 3a173c29d6f398af5f04091830d215c9
 - RUT2XX R 00.01.11.2: b4119189c17b32c67158aa87684de16c

```
    RUT2XX R 00.01.11.1: 701645ff52b8419bb7fe3106ee2d4330

    RUT2XX R 00.01.10: dcaf26223dc421a000ce1efa9e986abd

    RUT2XX R 00.01.07.1: 3c1986c10af49d2888d97d0cb03f270b

    RUT2XX R 00.01.07: 0ddc7a08ba4ea59daa537c2f5891c738

    RUT2XX R 00.01.06.1: c4a24691c7a8e27c4234038eeb664fa7

    RUT2XX R 00.01.04.2: 242c4d22481b494d607469d8c9bbcca1

    RUT2XX R 00.01.04.1: 9de4c7d3bf72b4735124e2fd4acb9244

    RUT2XX R 00.01.03.5: b0014498507f6881121b1390aa5e2f4a

    RUT2XX R 00.01.03.2: f05ae68ebc30d0497062b67d2ad3f94c

    RUT2XX R 00.01.02.6: dcb3ed6a48e4c27748c9c7795e6dcd15

    RUT2XX R 00.01.02.3: 22d2510df6a3f2cb7443f0521c25e367

    RUT2XX R 00.01.01.4: dd6defed845c3b1241826bffde38f08a

    RUT2XX R 00.01.01.00: 110dc5fab62cabdf67877f26fa8fa924

    RUT2XX R 00.00.553: c1359554ab6c8bb5e775c24ef693b280

    RUT2XX R 00.00.539: ae4c13c275fedd8bb5180c610a8f387a

    RUT2XX R 00.00.486: e225813d9baac399434f980058111df9

    RUT2XX R 00.00.482: b8ac4078ee364851d39e430739c00711

    RUT2XX R 00.00.474: 17cd9dbe8ff4190fb54a7d1e8a5f22a2

    RUT2XX R 00.00.388: f89224948117c22707595f326e4b9c38

    RUT2XX R 00.00.382: b7cc349570e99d141597489c61064931

    RUT2XX R 00.00.377: 713df01f8fc19a15c100dd07f868ec8e

    RUT2XX R 00.00.372: 84fa0a0a8d5b1d7f758e0da2c7bdf2c2

    RUT2XX R 00.00.355: 09ace4b06718c3bd722d7785e4c80606

    RUT2XX R 00.00.339: 46e9f561e5f5a456ee71c12c483e73c7

    RUT2XX R 00.00.312: 057fa357bf0c4b2a90b3098e8aabc078

• RUT2XX R 00.00.307: c38101f401f5c1eb50321d10edd77b4c

    RUT2XX R 00.00.296: bfa44fad547039c836ea5e2bdd031a71

    RUT2XX R 00.00.284: b37599e6778dc7e28a14d73ab7fc89b4
```

Bootloader

The Bootloader's checksum is not displayed in the WebUI before upgrade. So you can only calculate the checksum yourself using *md5sum*. As mentioned previously, this can be done with most Linux distros or by uploading the file into router and calculating the checksum from there. However, since the process for the Bootloader upgrade is different than for a firmware upgrade, you'll have to upload the file using a different method. Instructions on how to upload files into a router can be seen <u>here</u>.

 ${\tt RUT2XX} \ {\tt Bootloader} \ 2.0.1 \ {\tt checksum}: {\bf 967bd74928e7145940acba4b06a4e544}$